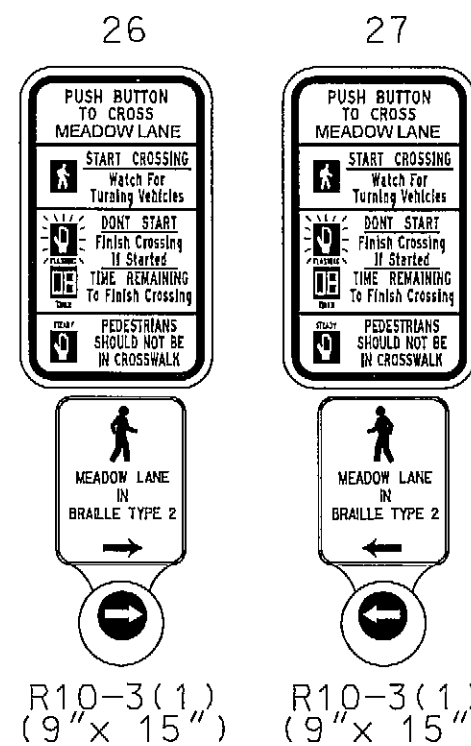




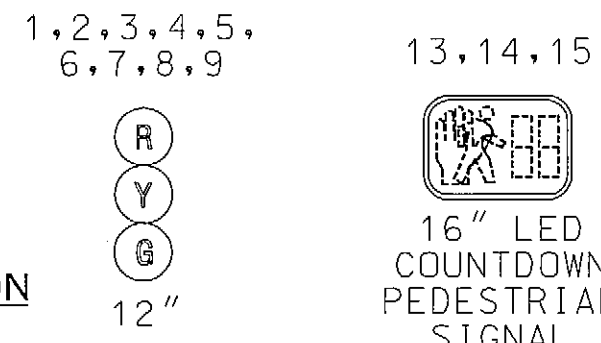
PROPOSED VIDEO DETECTION
a, b, c, d, e, f

PROPOSED ACCESSIBLE
PUSHBUTTONS AND SIGNS

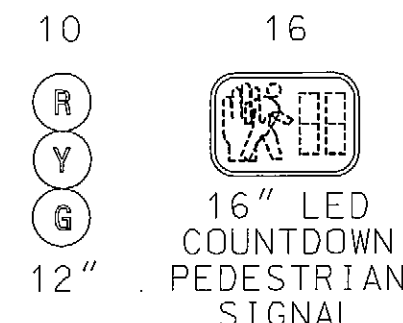


TO PENINSULA EXPWY

EXISTING LED SIGNALS TO REMAIN



EXISTING LED SIGNALS
TO BE RELOCATED

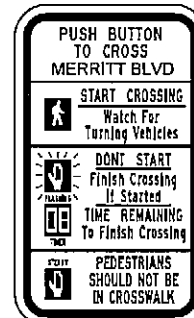


PROPOSED LED
SIGNALS

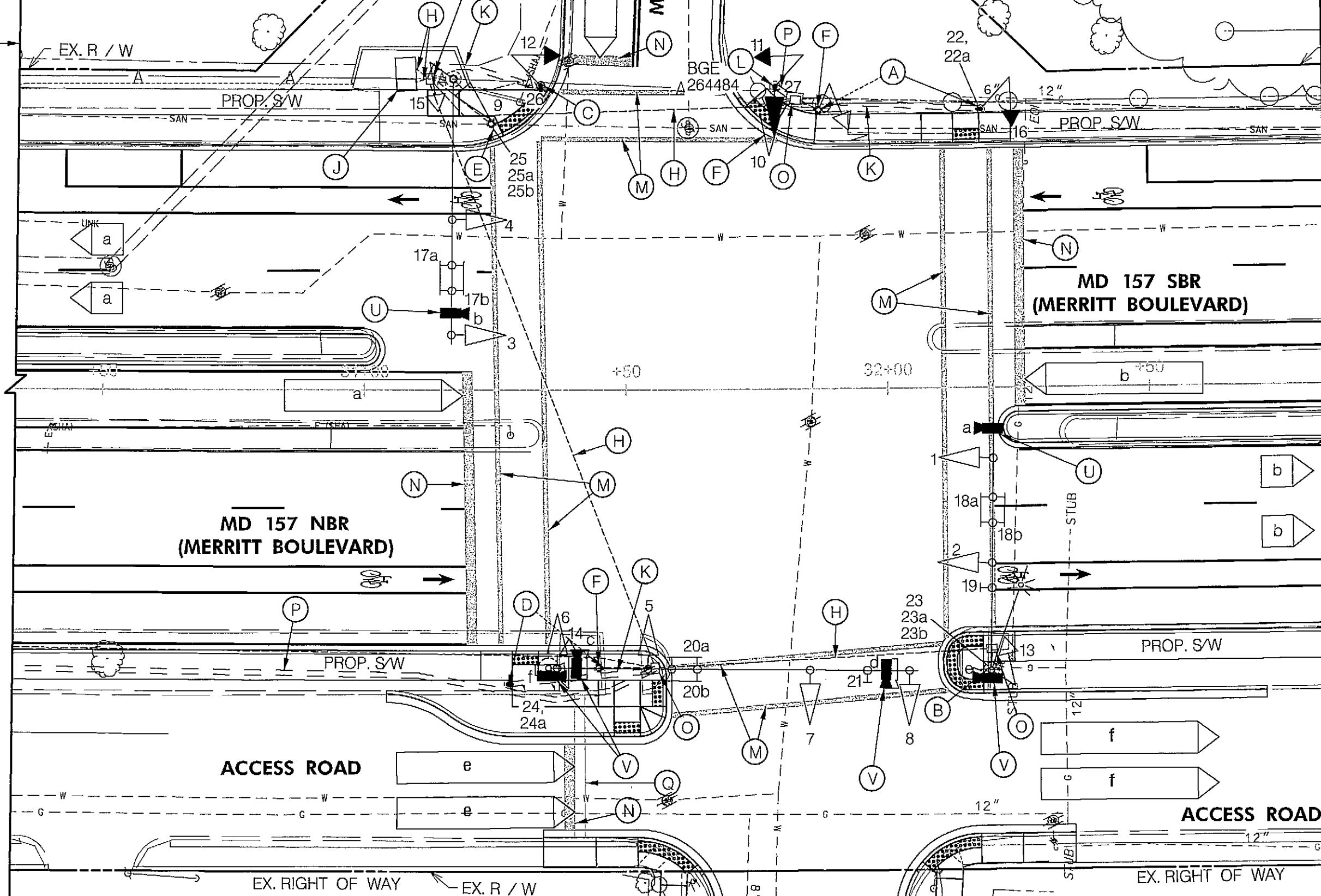
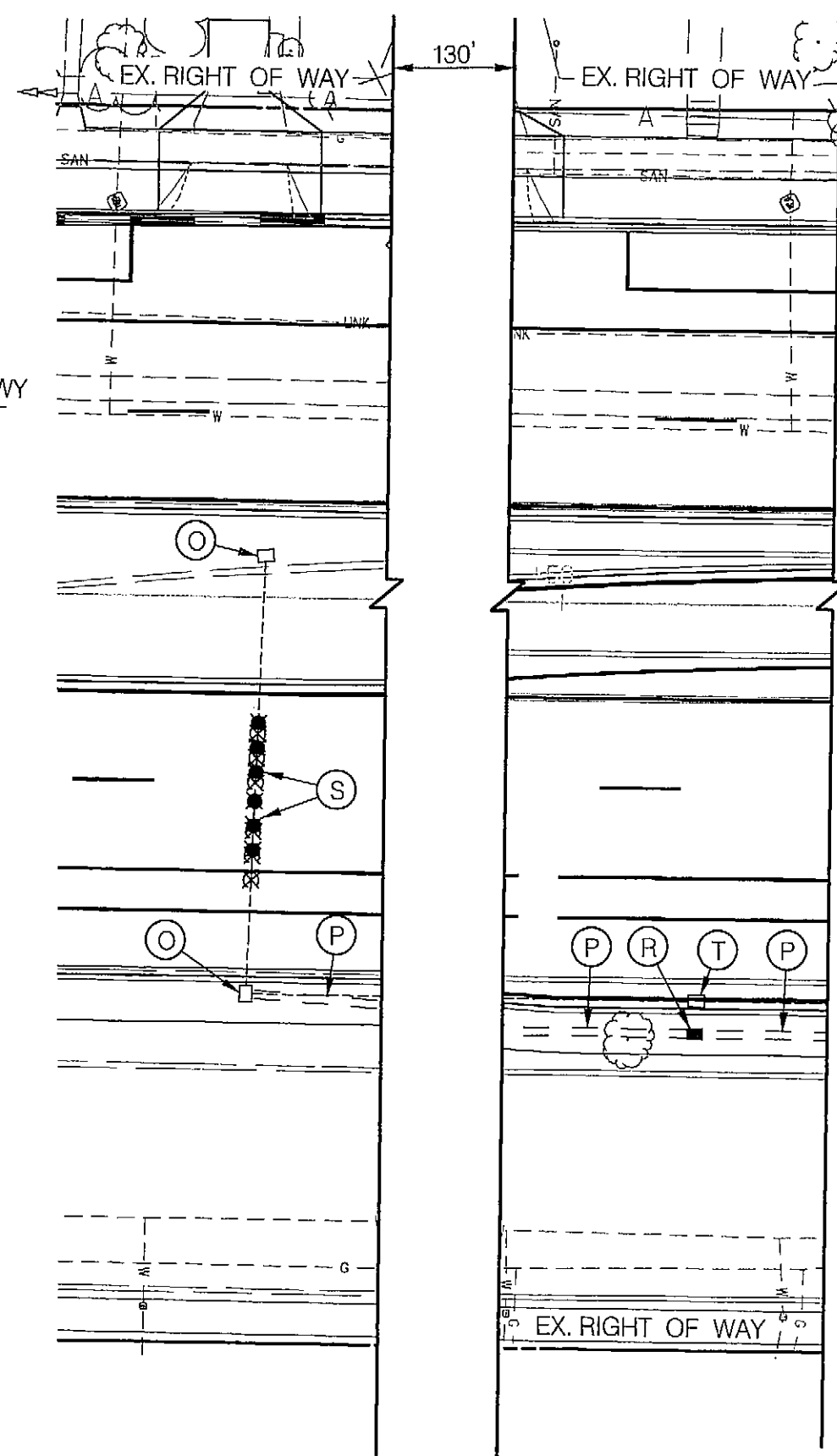


PROPOSED SIGNS

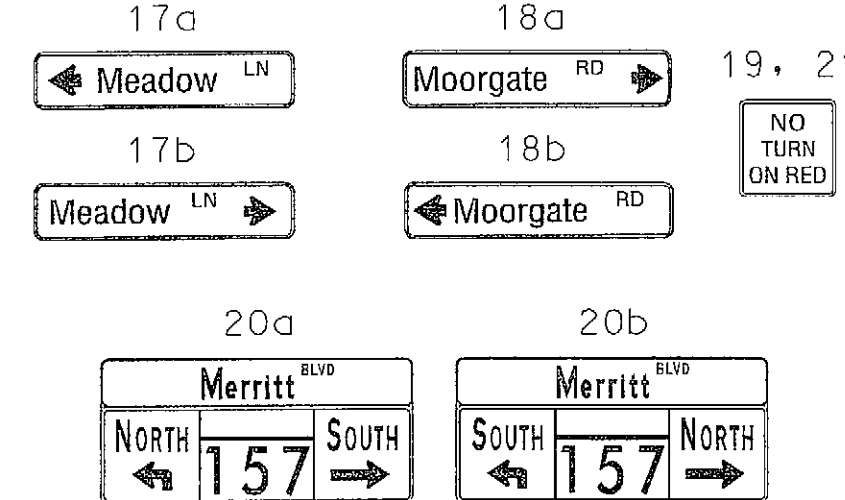
22a, 23a, 24a, 25a



EX. OH IC SOUTH
TO MERRITT AVE



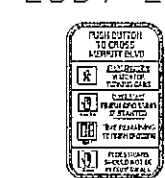
EXISTING SIGNS TO REMAIN



EXISTING ACCESSIBLE PUSHBUTTONS
TO BE RELOCATED

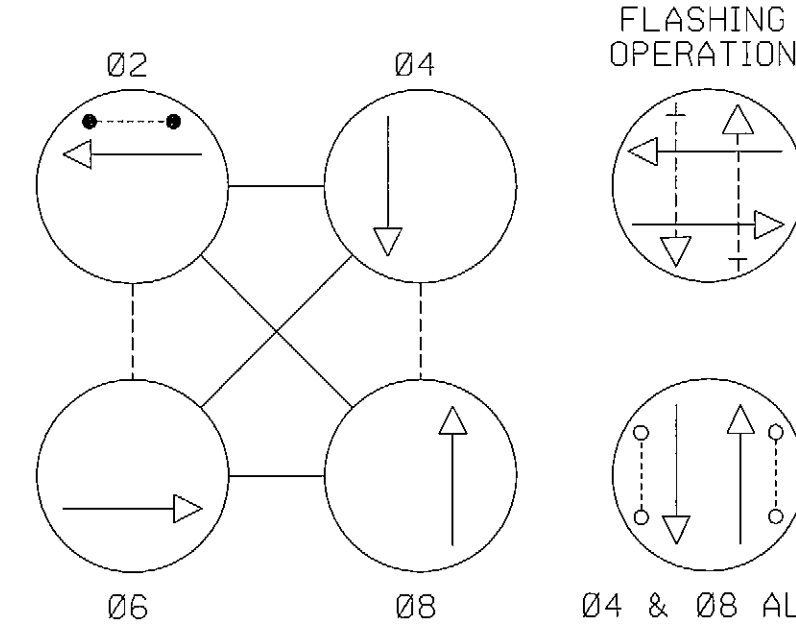


EXISTING SIGNS TO BE REMOVED



ADJUST 2 HANDHOLES
LOCATED IN DIMENSION
BREAK AREA TO GRADE

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE
MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE
WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSA STANDARD TYPICALS FOR TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
3. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATION, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.
4. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04, THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
5. THE CONTRACTOR SHALL INTEGRATE PROPOSED/EXISTING CONCRETE FOUNDATIONS WITH NEW CURB/SIDEWALK RAMP WHERE NECESSARY. THE FOUNDATIONS SHALL BE FLUSH WITH AND PART OF THE FINAL CURB.
6. THE SHA SIGNAL SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND PROPERLY LABELING ALL SIGNAL CABLES.
7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL CABLES.
8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATION PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY CONSTRUCTED RAMPS.
10. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSA STANDARDS.
11. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
12. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E.24 AND THE NCHRP PUBLICATION "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
13. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN 18 IN.
14. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. x 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
15. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
16. PUSHBUTTON ARROWS ARE TO BE TURNED PARALLEL TO THE CROSSWALK FOR WHICH THEY ARE INTENDED.
17. ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7650 TO COORDINATE.
18. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK CONSTRUCTION.
19. THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL MODIFIED TRAFFIC SIGNAL IS OPERATIONAL.
20. THE CONTRACTOR MUST COORDINATE THE INSTALLATION OF ALL PROPOSED SIGNAL EQUIPMENT WITH THE CONSTRUCTION OF THE PROPOSED SIDEWALK RAMPS. SEE DRAWING NOS. DE-03 & DE-04 FOR SIDEWALK RAMP DETAILS. ALL WORK MUST BE COORDINATED WITH THE ROADWAY CONTRACTOR.
21. THE CONTRACTOR SHALL CLEAN AND PLUG THE HOLES FROM EXISTING EQUIPMENT REMOVED FROM EXISTING SIGNAL POLES.
22. CONCRETE SIDEWALK SHALL BE REPLACED AS NEEDED DUE TO INSTALLATION OF TRENCHED CONDUIT.
23. VIDEO DETECTION CAMERAS 'a' AND 'b' SHALL BE PROGRAMMED FOR PRESENCE AND SAMPLING DETECTION ALONG MERRITT BOULEVARD.

CONSTRUCTION DETAILS

- A. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01. BREAKAWAY COUPLINGS, AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MERRITT BLVD" (NOTE: 1-2 IN. 90 DEGREE PVC BEND). RELOCATE EXISTING LED COUNTDOWN PEDESTRIAN SIGNAL HEAD #16 AND EXISTING ACCESSIBLE PUSHBUTTON #22 FROM THE EXISTING PEDESTAL POLE TO THE NEW PEDESTAL POLE.
- B. REMOVE EXISTING SIGN #23b AND INSTALL SIGN R10-3(1) "PUSH BUTTON TO CROSS MERRITT BLVD" ON EXISTING PEDESTAL POLE.
- C. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION SHA STD. MD 801.01-01. BREAKAWAY COUPLINGS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, ACCESSIBLE PUSHBUTTON (ARROW RIGHT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MEADOW LANE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND).
- D. INSTALL A 10 FT. BREAKAWAY PEDESTAL POLE (CUT TO 5 FT.) WITH FOUNDATION SHA STD. MD 801.01-01. BREAKAWAY COUPLINGS AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MEADOW LANE" (NOTE: 1-2 IN. 90 DEGREE PVC BEND). RELOCATE EXISTING ACCESSIBLE PUSHBUTTON #24 FROM THE EXISTING PEDESTAL POLE TO THE NEW PEDESTAL POLE.
- E. REMOVE EXISTING SIGN #25b AND INSTALL SIGN R10-3(1) "PUSH BUTTON TO CROSS MEADOW LANE" ON EXISTING PEDESTAL POLE.
- F. REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACK FILL. CAP AND ABANDON EXISTING CONDUIT.
- G. ADJUST NON-INVASIVE MICROLOOP PROBE SETS AS NECESSARY TO BE CENTERED IN TRAVEL LANES.
- H. USE EXISTING CONDUIT.
- I. USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.
- J. INSTALL 2 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- K. INSTALL A 14 FT. BREAKAWAY PEDESTAL POLE WITH FOUNDATION, TRANSFORMER BASE, ACCESSIBLE PUSHBUTTON (ARROW LEFT) AND SIGN R10-3(1) "PUSH BUTTON TO CROSS MEADOW LANE" (NOTE: 1-3 IN. 90 DEGREE PVC BEND). RELOCATE EXISTING TRAFFIC SIGNAL HEAD #10 FROM THE EXISTING PEDESTAL POLE TO THE NEW PEDESTAL POLE. INSTALL LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SIDE MOUNTED PER SHA STD. MD 814.03.
- L. INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES FOR CROSSWALK (SEE NOTE 10).
- M. INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES FOR STOPLINE (SEE NOTE 10).
- N. USE EXISTING HANDHOLE. ADJUST TO GRADE.
- O. INSTALL 3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT (TRENCHED).
- P. REMOVE EXISTING PAVEMENT MARKINGS.
- Q. INSTALL ELECTRICAL HANDHOLE.
- R. REMOVE EXISTING NON-INVASIVE MICROLOOP PROBE SET AND INSTALL NEW NON-INVASIVE MICROLOOP PROBE SET.
- S. REMOVE EXISTING HANDHOLE AND BACK FILL. CAP AND ABANDON EXISTING CONDUIT.
- T. REMOVE EXISTING DETECTION CAMERA ON EXISTING MAST ARM.
- U. INSTALL VIDEO DETECTION CAMERA ON EXISTING MAST ARM.
- V. REMOVE EXISTING VIDEO DETECTION CAMERA AND INSTALL NEW VIDEO DETECTION CAMERA ON EXISTING MAST ARM/SIGNAL POLE.

UTILITY LEGEND

| | | | |
|-----------|------------------|-----------|------------|
| — E — E — | ELECTRIC CABLES | — S — S — | SEWER MAIN |
| — A — A — | AERIAL CABLES | — G — G — | GAS MAIN |
| — T — T — | TELEPHONE CABLES | — W — W — | WATER MAIN |
| — F — F — | FIBER-OPTIC | | |

GEOMETRIC LEGEND

| | |
|-------|----------|
| ===== | PROPOSED |
| ----- | EXISTING |



STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: tanovk -



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 157 (MERRITT BOULEVARD)
AND MOORGATE ROAD/MEADOW LANE
DUNDALK, MARYLAND

TRAFFIC SIGNALIZATION PLAN

SCALE: 1" = 20' DATE: 08/2004 CONTRACT NO.: AT3575185

DESIGNED BY: M. HOWELL COUNTY: BALTIMORE
DRAWN BY: LOGMILE: 03015703.03
CHECKED BY: TMS NO.: G360
F.A.P. NO.: TOD NO.:

TS NO. 4339B DRAWING SG-03 OF 08 SHEET NO. 68 OF 100

| APPROVALS | REVISIONS |
|------------------|-----------|
| TEAM LEADER | |
| ASST. DIR. CHIEF | |
| DIVISION CHIEF | |
| OFFICE DIRECTOR | |

| | |
|---|--------------------------------------|
| ② INSTALL APS/CPS FOR NORTH SOUTH AND WEST LESS | SHA NO. BA3325177 TMS # L069 03/2013 |
| STV | STV |
| A APS/CPS, SIGNAL HEAD LED UPGRADE | SHA NO. BA1859188 TMS # J639 09/2009 |
| KMP | RG WH TH |

PLOTTED: Wednesday, January 30, 2013 AT 09:10 AM
FILE: I:\PROJECTS\4013887\4013887_006\Drawings\TRA\Traffic\Signals\Meadow\003_p50-P002_MD157_Meadow Lane.dgn